



Plant Variety Rights Act 1987 review: Issues Paper  
Submission

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On behalf of: Grasslanz Technology Ltd.

## Summary of Organisation

Grasslanz Technology is a plant technology provider, our products are proprietary technologies primarily delivered through seed and our end users are farmers. Our mission is to develop and commercialise innovative plant technologies. We establish alliances with seed companies to commercialise our products. We work with an international network of investors and research organisations to develop innovative new products.

Harvesting and sowing seeds are activities as old as civilisation. Innovative products and technologies add value to these ancient practices, and bring new opportunities to New Zealand livestock farmers.

Grasslanz Technology Limited is a wholly owned subsidiary of AgResearch. Grasslanz Technology develops, promotes and licences proprietary forage grasses and legumes, endophytes, and applied biotechnology to seed companies. These products are sold to farmers under licence from Grasslanz Technology by the seed companies.

Endophyte developments have been a major focus for Grasslanz Technology in recent years. Research undertaken by AgResearch (Grasslanz Technology's parent company) in the endophyte area is a major team effort by mycologists, chemists, agronomists, entomologists and plant breeders. Research into the identification, understanding, testing and commercialisation of an endophyte strain takes the best part of 20 years.

The development of novel endophytes is an expensive process over a long period of time, and they do offer farmers significant agronomic advantages and subsequent economic benefits. Due to these factors Grasslanz Technology and AgResearch have obtained Intellectual property protection in the form of plant variety rights. Therefore, Grasslanz Technology have a vested interest in the PVR Act review and the changes this may bring to protecting our proprietary work.

Questions 33 to 39 and 41 have been answered in conjunction with Grasslanz Technology's parent company AgResearch.

## Objectives of the PVR Act

### **1. Do you think the objectives correctly state what the purpose of the PVR Regime should be? Why/why not?**

We believe the objectives state the main purposes of the PVR regime. Incentivising the development and dissemination of new varieties and providing balance between breeders and growers must include stronger enforcement of rights and higher fines for the deterrence of offences. Grasslanz Technology invests approx. \$6m per annum into research and development of new plant technologies. To be able to continue investing it is essential that we are able to protect and recoup our investment.

### **2. Do you think the PVR regime is meeting these objectives? Why/why not?**

We believe the current PVR regime is not meeting these objectives. The New Zealand PVR regime needs to be brought into line with other international PVR regimes in order to strengthen our position internationally and make New Zealand more attractive to international breeders. Furthermore, we should be looking to the regimes of other UPOV 91 signatories such as the UK and EU to guide us in writing new legislation.

The current PVR regime does not incentivise the development and dissemination of plant varieties due to the high risk of infringement and low efficacy of enforcement that results in an imbalance between the interests of breeders, growers and society. Breeders' rights and ability to enforce are not strong enough, and the potential fines for committing an offence are too small to be a deterrent thereby limiting the opportunity to make a return on investment. Therefore, plant breeders have no faith that the current PVR regime effectively protects their years of investment.

### **3. What are the costs and benefits of New Zealand's PVR regime not being consistent with UPOV 91 (e.g. in terms of access to commercially valuable new varieties, incentives to develop new varieties)? What is the size of these costs/benefits? What are the flow on effects of these costs/benefits? Please provide supporting evidence where possible.**

The cost of the PVR regime not being consistent with UPOV 91 is that plant breeders will be less incentivised to produce new varieties for the benefit of New Zealand. UPOV 91 provides stronger rights for plant breeders to protect their investment. If plant breeders cannot make a meaningful return on their investment, they are less likely to develop new useful varieties. The potential increased revenue for breeders will encourage continued breeding activities as well as an increase in these activities. This will benefit the agricultural industry by providing access to a greater range of new and improved varieties which will benefit the economy as a whole and again, make New Zealand more attractive internationally.

Becoming consistent with UPOV 91 demonstrates to other UPOV 91 jurisdictions that we are willing to reciprocate the strong IP protection we enjoy in their countries. Overseas applicants make up 60% of the total number of PVR applications filed in New Zealand. There are currently 75 contracting parties to UPOV 91. Bringing the PVR regime into line with UPOV 91 will increase the attractiveness of New Zealand to international plant breeders and the number of applications will also increase. Evidence of this can be seen in the rapid increase in new applications filed at the Canadian PBRO following Canada's ratification of UPOV 91. At the same time, strengthening breeders rights will

make the development of new innovative cultivars more attractive to national breeders. Increasing the overall number of PVR applications filed.

There are no benefits to being inconsistent with UPOV 91. The cost of not being consistent with UPOV 91 is that there is a possibility that some breeders would only release their most innovative technologies in countries that have ratified UPOV 91 that provide stronger rights and more reliable and effective enforcement. Consequently, New Zealand growers would be denied access to the best innovative technologies from which they and New Zealand could benefit.

**4. Do you think there would be a material difference between implementing a sui generis regime that gives effect to UPOV 91 (as permitted under the CPTPP) and actually becoming a party to UPOV 91? If so, what would the costs/benefits be?**

Adopting a sui generis regime instead of becoming a party to UPOV 91 will require additional time and resources compared to ratifying to UPOV 91 and implementing a globally aligned framework used by other UPOV 91 countries. Some aspects of UPOV 91 are optional providing some flexibility for jurisdictions to tailor their PVR Act to their own needs and requirements.

### **Farm-Saved Seed**

**5. Are there important features of the current situation regarding farm-saved seed that we have not mentioned?**

Grasslanz Technology specialises primarily in the development and commercialisation of forage grasses, legumes and endophytes a sector where the impact of farm-saved seed is not greatly felt. This practice primarily affects the arable crop sector, particularly the cereal industry. However, Grasslanz Technology does have an interest in the cereal sector and the effect of seed saving on the return breeders can expect from their investment. This is an important feature not mentioned in the issues paper that can have a stifling effect on breeding programmes and causes concern for the genetic integrity of cultivars.

**6. Can you provide any additional evidence/information that would assist us to understand this issue? For example, the nature and extent of royalties that are currently paid in different sectors, and the proportion of crops planted each year using farm-saved seed.**

Members of the seed industry are seeing a mismatch between the volume of seed sold and the subsequent amount of royalties paid. Taking into account that there may be other variables affecting this, this can be partly attributed to the practice of seed saving.

In other sectors, royalties are collected based on different models. For fruit crops, such as some protected apple varieties, the breeders' share of commercialisation revenue is calculated as a percentage of the fruit sale price. For some protected raspberry varieties, the breeders' share of the benefit comes from an annual area based licence fee payable by each grower that applies for the life of the planting, plus a one-off royalty per plant.

**7. Do you think there are problems with the current farm-saved seed arrangements? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.**

The current farm-saved seed arrangements provide farmers with a self-supply, which can reduce the amount of return in a breeders' investment and the volume of seed sold for seed companies. There is concern that the seed of protected varieties is being multiplied and sold illegally – foregoing payment of tax and any return on the breeders' investment. Reduced royalties and volumes of seed sold stifle future investment into the development of new varieties.

Analysis by the NZPBRA working group estimates that breeders lose approximately \$2 million in royalties every year under the provisions of the current Act. The cost of breeding and commercialising a new cultivar is high, if the breeders do not receive a royalty then there is no contribution to the investment in new varieties. Consequently, development of new cultivars that are needed to overcome the problems with disease and fungicide resistance that are now being faced, particularly in the cereal industry, will be stifled or non-existent at the expense of the farmers, the agricultural industry and the economy.

There is additional concern from breeders that the genetic integrity of their variety will be compromised through the practice of farm-saved seed. Genetic integrity of a variety is important particularly for the end users of products intended for human and animal consumption.

**8. Do you think there are benefits of the farm-saved seed arrangements? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.**

Grasslanz Technology supports the long-held tradition of farmers saving seed for their own use. However, avoidance of royalty payment by large or corporate farms should not be permitted. The current regime benefits small farmers and this should continue in the new regime by introducing an exception to allow small farmers to continue using saved-seed without having to pay royalties.

**9. Do PVR owners use mechanisms outside the PVR regime to control farmers' use or saving of the seeds of their protected varieties? What are these?**

On rare occasions exclusive legal contracts will be signed by a farmer and PVR owner at the time of purchasing seed to prevent seed saving. However, this is not common practice and with no legislation to regulate this, the arrangement may not be fair for both parties.

**10. Do you think farmers should have to get permission from the PVR owner before sowing the farm-saved seed of a protected variety? Why/why not?**

We do not think that farmers should have to get permission from the PVR owner before sowing farm-saved seed of a protected variety. Requiring farmers to obtain permission from the PVR owner to sow farm-saved seed is not practicable. Improving penalties for offences and the effectiveness of enforcement would provide a greater deterrent and would be more effective than requiring farmers to get permission before sowing seed.

**11. What do you think the costs and benefits of a mandatory royalty scheme would be? What could such a scheme look like (e.g. should it cover all, or only some, varieties)?**

The benefit of a mandatory royalty scheme is that breeders would be able to recoup the money invested in producing a new variety and reinvest into new improved varieties. This ultimately benefits the farmer, agricultural industry and the economy.

One such royalty scheme could be for farmers to record the amount of seed sown yearly, which would be used to calculate the royalties due. Introducing the exception that small farmers may use saved seed freely without being required to pay a fee would help to protect those that would be most affected by the requirement to pay further royalties.

It is important that any royalty scheme that is introduced is flexible as demonstrated by other sectors. Royalty schemes that are currently in place for fruit crops allow different royalty collection points to be decided by the industry. Flexibility in collection points for different varieties works well for other sectors and a royalty scheme for this regime should reflect that.

### **Rights over Harvested Material**

#### **12. Are there important features of the current situation regarding rights over harvested material that we have not mentioned?**

No, the important features of the current situation have been sufficiently described.

#### **13. Do you agree with our definition of 'harvested material'? Why/why not?**

Yes, the definition for harvested material is broad enough to cover everything that can be harvested from a plant and excludes everything that would come under propagating material.

#### **14. Do you think there are problems with the current scope of PVR owners' rights over harvested material? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.**

No, we think the current scope of PVR owners' rights over harvested material provide sufficient protection. However, it would be beneficial to have the added protection of being able to enforce plant breeders' rights where produce of a protected variety is imported into New Zealand from a country where it cannot be protected. This would help deal with potential attempts to avoid royalty payment by using propagating material of a protected variety in a country where it cannot be protected and subsequently importing the produce to be sold in New Zealand.

#### **15. Do you think there are benefits to the current scope of PVR owners' rights over harvested material? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.**

### **Rights over similar varieties**

#### **16. Are there other important features of the current situation regarding distinctness that we have not mentioned?**

We think the important features of the current situation regarding distinctness have all been covered.

#### **17. Are there other important features of the concept of EDVs that we have not mentioned?**

There needs to be a balance struck between the protection of essentially derived varieties and the ability for breeders to use protected varieties to produce new and improved cultivars.

**18. Do you think there are problems with the current approach for assessing distinctness? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.**

Greater investment in improved centralised trials should be a key aim of the new regime particularly by introducing the use of genetic and phenotypic techniques to assess distinctness.

**19. Do you think there are benefits with the current approach for assessing distinctness? What are they? What are the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.**

One of the benefits of the current approach for assessing distinctness is the centralised trial system.

**20. How might technological change affect the problems/benefits of the current approach for assessing distinctness that you have identified?**

Developments in molecular or phenotypic techniques may help address some of the current problems in assessing distinctness by providing more clarity and certainty.

**21. Do you have any examples of a plant breeder 'free-riding' off a variety? How often does this happen? What commercial impact did this have? Please provide evidence where possible.**

Some industry partners believe that varieties sold by smaller companies may be in breach of PVR or are an EDV. However, providing evidence is difficult as these smaller companies tend to sell uncertified seed that may vary from year to year.

**22. Do you think there are problems with not having an EDV regime? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.**

The problem with not having an EDV regime is that any benefits developed by one breeder and utilised by another are not recognised. Again, this can stifle innovation and reduce the number of new and improved varieties being made available.

**23. Do you think there are benefits of not having an EDV regime? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.**

We do not believe there are any benefits of not having a balanced EDV regime.

**24. How might technological change affect the problems/benefits of not having an EDV regime that you have identified?**

Advances in molecular technologies and increased access means that these tools are becoming the norm in international breeding programmes. For breeders and farmers in New Zealand to utilise and benefit from these elite international genotypes we need to establish and maintain an EDV system.

### **Compulsory licences**

**25. Are there important features of the current situation regarding compulsory licences that we have not mentioned?**

No, all the features of the current situation regarding compulsory licences have been covered in the issues paper.

**26. Do you think there are problems with the current compulsory licence regime? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.**

The Act is unclear on what constitutes “reasonable quantities/quality/price” and does not provide a definition on the term “public interest”. This is subsequently left to the Commissioner to decide which opens up the possibility of misuse of the compulsory licence regime. Is allowing a company a compulsory licence in order to use a different variety of a fruit in their manufacturing process in the public interest? This lack of definition may also unfairly penalize companies that are making use and making available their protected varieties but because of their size or capabilities may not be able to make the variety available at a level that is deemed “reasonable”.

**27. Do you think there are benefits with the current compulsory licence regime? What are they? What is the size of these benefits? What are the consequences of these benefits? Please provide evidence where possible.**

The compulsory licence regime acts as a deterrent to PVR owners from withholding their protected varieties.

#### **Enforcement: infringements and offences**

**28. Are there important features of the current situation regarding infringements and offences that we have not mentioned?**

It is not made clear that current options for enforcement of rights are costly and time consuming, with no guarantee of a successful outcome for the PVR owner. Enforcement of PVR rights needs to be more accessible, provide greater certainty and needs to be financially plausible. The penalties for infringement need to be higher to be an effective deterrent and aligned with those of other IP regimes in New Zealand.

**29. Have you been involved in a dispute relating to the infringement of a PVR? How was it resolved (e.g. was alternative dispute resolution used)? How effective was the process?**

Grasslanz Technology has not been in a dispute relating to the infringement of a PVR.

**30. How prevalent are PVR infringements and offences?**

PVR infringements and offences whilst difficult to prove are believed to be prevalent in the industry. For example it is thought that small independent seed retailers or competing seed companies sell PVR seed as non-PVR seed through alternative (incorrect) labelling.

**31. Do you think there are problems with the infringement provisions in the PVR Act? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.**

PVR owners want public acknowledgement that their rights have been breached and appropriate measures taken in order to reduce the likelihood of future infringement occurring.



The current Act is not explicit on what constitutes infringement; changes to the Act should be made to provide more certainty. Currently what constitutes infringement is left to the courts to decide. However, court cases are timely, costly and complicated by the difficulty in providing sufficient and strong enough evidence. Furthermore, the Act is not clear on what sort of evidence is required or how to obtain it. The current wording of the Act means evidence of commercial transactions is essential and the primary evidence as this satisfies the “sell or offer to sell” requirement. However, this type of evidence is near on impossible to obtain. Often infringers will verbally communicate to customers the exact variety that is being sold but the invoice and other documents will only show a generic/botanical name. To bring an infringement case often requires identification of the infringer, collecting evidence and performing genetic and phenotypic testing which is all time consuming and costly. Whilst phenotypic and genotypic work is important, it is only accepted as supporting evidence.

Moreover, the current Act is not clear on the extent of damages that can be awarded. The cost of a high court case, including lawyers, combined with the small market for a variety in New Zealand could leave PVR owners worse off for trying to enforce their PVR. Because the rights of the PVR owner are not strong enough and neither is enforcement, it often costs more to take an infringer to court than what can be gained by doing so. This deters rights holders from enforcing their rights, rather than deterring infringement.

The stronger rights provided by UPOV 91 would provide more certainty that effective enforcement could occur. In addition, under UPOV 91 document evidence of a sale would not be required making the process of collecting sufficient evidence to prove infringement easier. Ultimately, the value of a PVR would not be undermined by the owners’ inability to enforce their rights.

To allow rights holders to enforce their rights support from a PVRO or IPONZ inspectorate body would be ideal. This could provide simplification for the administrative process and procedures and provide clearer guidance on what constitutes infringement. This would make the process more cost effective and would allow disputes to be resolved quicker, at less expense and without the need for a High Court case. This could also provide the added benefit of decisions being made by specialists who understand the PVR regime and the industry.

**32. Do you think there are problems with the offence provisions in the PVR Act? What are they? What is the size of these problems? What are the consequences of these problems? Please provide evidence where possible.**

The offences outlined by the PVR Act cover a broad range of activities. However, the deterrent for these is too small, the maximum penalty being a fine of \$1000. To an infringer, \$1000 is inconsequential compared to the gains and the likelihood of being identified and taken to court.

Instead the PVR regime should include a provision for damages similar to those in other IP regimes in New Zealand to effectively deter infringers.

### **The kaitiaki relationship and the PVR Act**

**33. How does the current PVR regime assist, or fail to prevent, activity that is prejudicial to the kaitiaki relationship? What are the negative impacts of that activity on the kaitiaki relationship?**

The current regime provides no mechanism by which taonga species might be identified during the registration process. As a consequence of this, there is currently no framework within the regime by which the kaitiaki relationship can be considered.

There appears to be no clear mechanism within the current PVR regime to either identify or protect the special relationship between kaitiaki and taonga species, or to prevent activity that is prejudicial to the kaitiaki relationship.

**34. What are the problems that arise from the PVR grant process, or the grant of PVR over taonga species-derived varieties more generally, for kaitiaki relationships? Please provide examples.**

As kaitiaki are unable to participate in the registration process, there is a risk that PVRs may be issued to cultivars where the whakapapa of a species has been altered and this may be considered takahi (a negative effect) on the mana of kaitiaki and their relationship with taonga plant species.

This could be mitigated by developing a process whereby the kaitiaki relationship is identified and respected during the registration process. Additionally, consideration could also be given to developing guidelines for plant breeders and/or a mechanism to review the tikanga surrounding accessibility, harvesting and cultivation of taonga species.

**35. What role could a Māori advisory committee play in supporting the Commissioner of PVRs?**

A Māori advisory committee could support the Commissioner of PVRs by identifying applications that derive from native plants, or if there is an existing relationship established by kaitiaki to the plant species. The committee could also make recommendations as to the appropriateness of proposed variety names.

The committee could also help identify and make recommendations on how to determine who may have existing knowledge of the plant, including the the Māori use/s of the plant and whether there are any barriers to commercialisation. Any recommendation of non-registration which is made by the Māori Advisory committee should be highly persuasive to the Commissioner of PVRs.

If applicants are required to provide detail which helps identify the ecosystem the plant is traditionally found in, this will help with establishing who the potential kaitiaki are e.g plant species found in different hapu or whanau rohe.

The Māori Advisory Group could also have a role in the engagement process with kaitiaki, and facilitating the benefit sharing discussions. We understand that the Environmental Protection Agency has a kaitiaki consultation process for importing exotic material into New Zealand and provides guidance for when consultation should occur.

**36. How does industry currently work with kaitiaki in the development of plant varieties? Do you have any examples where the kaitiaki relationship has been considered in the development of a variety?**

Grasslanz Technology specialises in forage grasses and legumes, and endophytes that are all species that have been introduced into New Zealand rather than native species.

**‘Discovered’ varieties**

**37. Are there examples of traditional varieties derived from taonga species that have been granted PVR protection? Do you consider there is a risk of this occurring?**

Kumara is a taonga species of which there are varieties that have been granted PVR protection.

## Offensive names

### **38. What characteristics might make a variety name offensive to a significant section of the community, including Māori?**

A variety name for a taonga species-based cultivar may be considered offensive of Māori if it fails to acknowledge the whakapapa of the species and/or if the name fails to align with the plant's traditional uses. For example plants that used in rōngoa māori should not be named after a person.

If a kaitiaki of the original plant species is able to be identified then they should be consulted and their perspectives should inform the Māori advisory committee's recommendations in this respect.

## Transparency and participation in the PVR regime

### **39. What information do you think should/should not be accessible on the PVR register? Why?**

Preferably, the register should identify whether a PVR is derived from a taonga species and, if so, who the kaitiaki are for a species and what consultation process was followed as part of the development and/or grant process.

The register should include:

- Inventory of indigenous derived species
- Identification of the Māori name for the original plant species
- Pedigree records
- Extensive evaluation
- Place of geographical origin
- Any other information required (e.g. DNA fingerprinting) to enhance the relationship of kaitiaki to their taonga plant species.

### **40. As a plant breeder, do you gather information on the origin of genetic material used in plant breeding?**

Yes, wherever possible we gather information on the origin of genetic material used.

## Other Treaty of Waitangi considerations

### **41. What else should we be thinking about in considering the Crown's Treaty of Waitangi obligations to Māori in the PVR regime? Why?**

That consideration be given to establishing a system that identifies benefits in the form of royalties and general access for protection purposes flowing to kaitiaki of indigenous plants listed on the inventory.

## Additional issues

### **42. Do you have any comments on these additional issues, or wish to raise any other issues not covered either in this section, or elsewhere in this paper?**

## Other Comments

### **43. Are there any additional comments you wish to make about the PVR Act review Issues Paper?**